

Local Water Supply Project Construction Loan Application

Water Conservation Bond Law of 1988

California Department of Water Resources
Division of Planning and Local Assistance

Revised January 2003



Introduction

The Water Conservation Bond Law, passed by California voters in 1988, authorizes the California Department of Water Resources (*DWR*) to administer a \$20 million program that provides construction and feasibility study loans to local public agencies for the development of local water supplies. A maximum of \$5 million is available for each single construction project and up to \$500,000 for each feasibility study. The interest rate for these loans will be equal to the rate that the State pays on the general obligation bonds sold to finance the program.

This application is only for those local public agencies seeking a construction loan. A separate application is to be used for applicants seeking a feasibility study loan. To obtain a feasibility study loan application, call DWR's Division of Planning and Local Assistance at (916) 651-9635.

Copies of this local water supply project construction loan application and copies of the local water supply project feasibility study loan application are also available at:
www.water.ca.gov/grants-loans.

The applicant should initially complete *only* Parts A and B of this application package and submit them to DWR to establish initial eligibility of the applicant and project. Once DWR determines preliminary eligibility, the applicant will be notified to complete and submit the remainder of the application.

The applicant agency is responsible for repaying the construction loan.

Table of Contents

Introduction	ii
General Instructions.....	v
Proposition 82 Construction Loan Application Process	viii
Part A—Organizational, Financial, and Legal Information	2
A-1 Application cover sheet	2
A-2 Agency representatives	3
A-3 Feasibility study cost	4
A-4 Plat map of service area	7
A-5 Authorizing resolution	7
A-6 Financial statements	7
A-7 Cash reserves	7
A-8 Existing debt	8
A-9 Repayment method.....	9
A-10 Loan security	9
A-11 Rate and service structure	10
A-12 Population data.....	11
A-13 Agency authority	12
 Part B—Project Description	 13
B-1 Map and narrative description	13
B-2 Legal description of project	13
B-3 Project time schedule.....	13
 Part C—Engineering and Hydology Feasibility	 15
C-1 Certification statements.....	15
C-2 Project hydology	15
C-3 Project reports	16
C-4 Preliminary plans and specifications	16
C-5 Construction inspection	16
C-6 Department of Health Services Drinking Water Field Operation Branch project approval	16

Table of Contents *(continued)*

Part D—Economic Justification	18
D-1 Project performance	18
D-2 Project costs	19
D-3 Calculating project costs	19
D-4 Project benefits.....	19
D-5 Calculating project benefits.....	21
D-6 Benefit/cost ratio	23
 Part E—Statewide Interest	 33
 Part F—Critical Need	 34
F-1 Physical need for the proposed project.....	34
F-2 Impacts of not constructing the proposed project.....	34
 Part G—Environmental documentation	 35
G-1 California Environmental Quality Act and National Environmental Policy Act	36
G-2 Demonstration of community support and/or opposition	36
G-3 Permits, easements, acquisitions, certifications	36
G-4 Water conservation program.....	36
 Appendixes	
I Checklist of attachments	A-1
II Certification statement	A-2
III Sample resolution	A-4
IV Permit checklist.....	A-5

General Instructions

Who may apply?

Local public agencies are eligible to apply for loans. A local public agency is any city, county, city and county, district, joint powers authority, or other political subdivision of the State involved in water management.

Eligible projects

An eligible project may include a canal, dam, reservoir, desalination facility, groundwater extraction facility, or other construction or improvement, including rehabilitation of a dam for water supply purposes by a local public agency for the diversion, storage, or distribution of water which will remedy **existing** water supply problems.

A project will **not be eligible for a loan** if more than 50 percent of its expected benefits would result from hydroelectric power generation. Loan funds are not available for the development of recreation facilities.

Any part or all of the project facilities, including land under the facilities, may consist of separable features or an appropriate share of multipurpose features of a larger system or both.

More detailed descriptions are provided in each relevant section of the application.

How to submit an application

The applicant will initially complete only Parts A and B of the application package and submit them to DWR for review.

DWR will use the information in Parts A and B of the application to establish initial applicant and project eligibility and ability to repay the loan. Once these are established, the applicant will be notified to complete the remaining parts of the application to establish the project's priority for funding. When DWR receives the remainder of the application, (*Parts C through G and appropriate Appendices*) it will be placed into priority "B" and reviewed in the order received. DWR staff will request further information, if the application is incomplete. All necessary information must be submitted before an application is considered complete.

What happens after submitting the application?

DWR will evaluate the application based on the following criteria:

Points

Economic justification.....	50
Engineering and hydrogeologic feasibility	20
Critical need	20
Statewide interest	10
Total	100

When an application is complete and has a minimum score of at least 70 points, DWR will move the project into priority "A." All priority "A" projects will immediately become eligible for funding; funds will be allocated based on their availability (see "Proposition 82 Construction Loan Application Process" on page vi.). The California Water Commission and the Legislature must approve all funding requests. (DWR will obtain those approvals.)

Help in completing the application

DWR needs specific information to evaluate your loan request. For help in completing the application, contact the following:

Questions about Part A should be referred to:

Linda Buchanan
Department of Water Resources
Loans and Grants Program
Sacramento
Phone: (916) 651-9645
Fax: (916) 651-9607

Questions about Parts B, C, E, F, and G should be referred to:

David A. Rolph
Department of Water Resources
Division of Planning and Local Assistance
Loans and Grants Program
Sacramento
Phone: (916) 651-9635
Fax: (916) 651-9607

Questions about Part D should be referred to:

Lorraine Marsh
Division of Planning and Local Assistance
Department of Water Resources
Sacramento
Phone: (916) 653-6414
Fax: (916) 651-9607

Submitting the application

The forms and attachments described in this booklet are required for a completed application. Appendix I is a checklist of all the requirements for a completed application.

Complete and submit Appendixes I and II. Appendix III is provided as an example of a resolution.

Please submit four (4) copies of the application to:

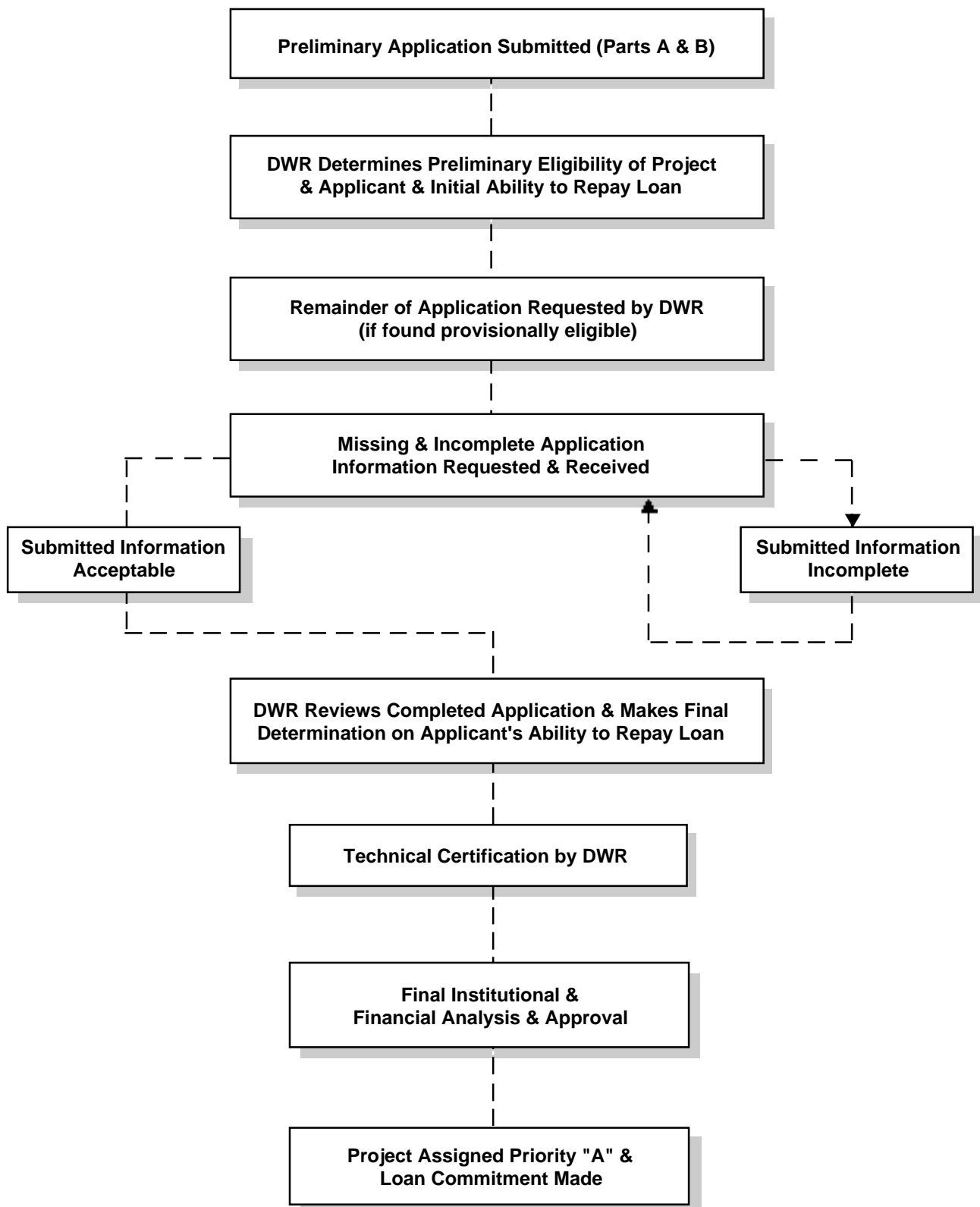
Department of Water Resources
Division of Planning and Local Assistance
Loans and Grants Program
P.O. Box 942836
Sacramento, CA 94236-0001
Attention: Linda Buchanan

If you do not have sufficient information to complete this application, consider applying for a feasibility study loan. This application is only for projects ready for construction. To receive a feasibility study loan application, contact:

David A. Rolph
Department of Water Resources
Division of Planning and Local Assistance
Loans and Grants Program
Sacramento
(916) 651-9635

Or visit our Web site at **www.water.ca.gov/grants-loans** to download the application.

Proposition 82 Construction Loan Application Process, Local Water Supply Program



Important!

Submit only Parts A & B of this application (and applicable attachments) to establish initial eligibility. If eligible, you will be notified to submit the remainder of the application.

Part A - Organizational, Financial and Legal Information

A-1

Application cover sheet

State of California, The Resources Agency, Department of Water Resources

Application for a construction loan for local water supply facilities under the Water Conservation Bond Law of 1988

The _____
(Exact legal name of agency applying for and repaying loan)

of _____
(Mailing address of agency)

of the County of _____ State of California, does hereby apply to
the California Department of Water Resources for a loan in the amount of \$ _____
for the following project under the Water Conservation Bond Law of 1988:

(Specify project title)

Requested repayment term is ____ years (not to exceed twenty years)

The application is to study:

- ☐ Construction of a canal
- ☐ Construction of a groundwater extraction facility
- ☐ Construction of a dam
- ☐ Rehabilitation of a dam
- ☐ Distribution system
- ☐ Other (describe) _____

By _____ Date _____
(Signature of authorized representative, see Section A-4, page 7)

(Print or type name of authorized representative)

Title _____

Telephone (____) _____

Fax (____) _____

E-mail _____

A-2

Agency representatives

Project contact person:

Name _____

Title _____

Telephone (____) _____

Fax (____) _____

E-mail _____

Alternate contact person:

Name _____

Title _____

Telephone (____) _____

Fax (____) _____

E-mail _____

Type of Organization: _____

(Water district, irrigation district, city, etc.)

California Assembly Representative: _____

District No. _____

California Senate Representative: _____

District No. _____

Attach a copy of agency charter and the names and titles of agency officers.

Mark as Attachment A-2.

A-3**Project cost**

1) Prepare a proposed project budget (*complete Attachment A-3 on page 5, "Project budget—capital costs;" see Table A-3 on page 6 for a sample project budget; if additional details need to be provided, attach a separate page*).

2) Provide financing information about the proposed feasibility study (*see below*).

**Mark the itemized budget and financing
information as Attachment A-3.**

Total cost of project: \$ _____

Amount of project to be funded under the Water Conservation and
Water Quality Bond Law of 1988: \$ _____

Requested repayment term: _____
(Years)

Amount to be funded by the agency: \$ _____

Indicate source of funds: _____

Amount to be funded externally: \$ _____
(Include any other pending applications)

Lender: _____ Lender: _____

Amount: \$ _____ Amount: \$ _____

Interest Rate: _____
Percent Percent

Term: _____ Term: _____
Years Years

Annual Payment: \$ _____ Annual Payment: \$ _____

Attachment A-3
Project budget—capital costs

Capital Cost Category	Item Description	Who Will Perform Work?	Item Quantity	Unit Cost in Dollars	Extended Cost in Dollars	Contingency Cost @ 15%	Subtotals
Land Purchase/ Easement							
Planning/Design/ Engineering							
Materials/ Installation							
Structures							
Equipment Purchases/ Rentals							
Environmental Mitigation/ Enhancement							
PROJECT SUBTOTAL							
Construction Administration & Overhead							
Legal & License Fees							
Other							
TOTALS							

Table A-3
Sample project budget—capital costs

Capital Cost Category	Item Description	Who Will Perform Work?	Item Quantity	Unit Cost in Dollars	Extended Cost in Dollars	Contingency Cost @ 15%	Subtotals
Land Purchase/ Easement	not applicable						
Planning/Design/ Engineering	plans, specifications, inspection	consulting firm	1	144,419	144,419	21,663	166,082
Materials/ Installation	see description under structures						
Structures	10 million gallon prestressed concrete water storage reservoir (lump sum, including materials & installation)	contractor	1	2,840,248	2,840,248	426,037	3,266,285
Equipment Purchases/ Rentals	not applicable						
Environmental Mitigation/ Enhancement	not applicable						
PROJECT SUBTOTAL					2,984,667	447,700	3,432,367
Construction Administration & Overhead	office work, meetings, CEQA	staff	5%	3,432,367	171,618	25,743	197,361
Legal & License Fees	technical certification, contracts	staff counsel	2%	3,432,367	68,647	10,297	78,944
Other	not applicable						
TOTALS					3,224,932	483,740	3,708,672

A-4**Plat map of service area**

Provide a plat map of the service area responsible for loan repayment, including a list of all property parcels affected by the debt. It may be an entire district or an assessment district.

Mark as Attachment A-4.

A-5**Authorizing resolution**

Include a resolution adopted by the agency's governing body authorizing the application for a local water supply facilities loan under this program and designating a representative to sign the application. Appendix III on page A-4 is a sample resolution format.

Mark as Attachment A-5.

A-6**Financial statements**

Attach copies of financial statements for the last three fiscal years of agency operation. Include balance sheets, income statements, sources and uses of funds statements, and the most recent annual budget.

Mark as Attachment A-6.

A-7**Cash reserves**

List all cash reserves (*restricted and unrestricted*) and any planned uses of those reserves.

Mark as Attachment A-7.

A-8**Existing debt**

Summarize all existing agency long-term indebtedness, including bonds and any pending indebtedness (*e.g., U.S. Department of Agriculture Rural Development loans or Economic Development Agency loans*). If necessary, include additional pages. **Mark as Attachment A-8.**

Lender: _____	Lender: _____	Lender: _____
Original Principal \$ _____	Original Principal \$ _____	Original Principal \$ _____
Purpose: _____	Purpose: _____	Purpose: _____
Original Date: _____	Original Date: _____	Original Date: _____
Original Terms: Percent _____ Years _____	Original Terms: Percent _____ Years _____	Original Terms: Percent _____ Years _____
Annual Payment _____	Annual Payment _____	Annual Payment _____
Current Principal \$ _____	Current Principal \$ _____	Current Principal \$ _____
Remaining years to pay _____	Remaining years to pay _____	Remaining years to pay _____
Has this agency ever issued bonds or notes for debt? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, provide the following information for the two most recent issues:		
Purpose	Purpose	
(Check one) <input type="checkbox"/> General Obligation <input type="checkbox"/> Revenue Bond Principal Amount \$ _____ Interest Rate True interest cost _____ Net interest cost _____	(Check one) <input type="checkbox"/> General Obligation <input type="checkbox"/> Revenue Bond Principal Amount \$ _____ Interest Rate True interest cost _____ Net interest cost _____	
Terms _____	Terms _____	
Date of Issue _____	Date of Issue _____	
Rating _____	Rating _____	
Rating Agency _____	Rating Agency _____	
How will the proposed DWR loan affect long-term and short-term financial capacity (<i>qualitatively/quantitatively</i>)? _____ _____ Current debt-to-income ratio (percent) : _____ After proposed construction loan (percent) : _____		

A-9**Repayment method**

Indicate the agency's proposed method to repay the feasibility study loan:

☐ 1. Standby charges

☐ 2. Excess revenues

Source: _____

☐ 3. Cost savings

☐ 4. User fees

☐ Flat rate

☐ Quantity of water used

☐ 5. Assessments

☐ 6. Other

Describe: _____

If methods 1, 4, or 5 are to be used to repay the loan, include a plan to divide costs among the system users. Use dollar estimates.

Mark as Attachment A-9.

A-10**Loan security**

Explain how the agency proposes to secure this loan if required to do so by the State (*dedicated revenues, assessments, etc.*). Cite statutory authority to use this method to secure the loan.

Statutory Authority:

Mark as Attachment A-10.

A-11**Rate and service structure**

Attach the agency rate structure for the last three (3) years.

Mark as Attachment A-11.

Estimated average monthly water bill: \$ _____

Residential
Average month: _____

Agricultural
Average month: _____
(per acre-foot)

Peak month: _____
Year

Peak month: _____
Year

Total possible nonagricultural connections in service area: _____

Number of undeveloped parcels in service area: _____

Number of developed residential parcels: _____

Number of developed commercial parcels: _____

Indicate the approximate number of actual connections for the date and year listed below:

Number of Connections		
Year/Date	Residential	Other
12/31/Current Year (CY)		
12/31/CY + 1*		
12/31/CY + 2*		
12/31/CY + 3*		
12/31/CY + 4*		

**Estimate*

Volume of water delivered through system per year: _____

A-12**Population data** *(not applicable for agricultural projects)*

Total population of service area that will repay the loan

Year-round/Permanent: _____ As of: _____
(Date)

Seasonal/Part-time: : _____ As of: _____
(Date)

Seasonal peak population *(if applicable)*: _____

Persons per household: _____

Source of above information: _____

Projected population:

Current Year + 5 _____

Current Year + 10 _____

Source of above information: _____

Household median income of water service area:

Amount: \$ _____ As of _____
(Date)

Source of above information: _____

County median income *(available from the county planning department):*

Amount: \$ _____ As of _____
(Date)

Source of above information: _____

What tax rate areas are included in the area to benefit from or pay for the project?
(This information is available from the county assessor.)

Mark as Attachment A-12.

A-13**Agency authority**

Attach a written opinion from the agency's attorney answering the following six questions pertaining specifically to this loan application. For each question, cite statutory authority or other references.

1. Does the agency have the legal authority to enter into a loan contract with the State of California, such as this application? Cite the statutory authority under which the agency may borrow funds for the purpose, amount, and duration requested.
2. What is the statutory authority under which the agency was formed and is authorized to operate?
3. Is the agency required to hold an election before entering into a loan contract with the State? Cite the statutory authority or other references.
4. Does the agency have the legal authority to levy assessments and/or charges sufficient to repay the proposed State loan? (Also address Loan Security, Part A-10.)
5. Will a loan agreement between the agency and the State of California be subject to review and/or approval by other government agencies? Identify all such agencies (*e.g., Local Area Formation Commission, local governments, U.S. Forest Service, California Coastal Commission, Health Services, etc.*).
6. Describe any pending litigation that impacts the financial condition of the agency or the operation of the water facilities. If none is pending, so state.

Mark as Attachment A-13.

Part B - Project Description

B-1

Map and narrative description of project

Provide a detailed narrative description of the proposed project, including a discussion of the purpose of the project and existing water supply situation that has created the need for the project. *(Preliminary plans and specifications are to be submitted at a later date; see Part C, Engineering and hydrologic feasibility on pages 15 to 18.)*

Also describe any related facilities that may need to be added to the existing water supply system in order to make the project operational. For example, the project may be a pipeline to deliver recycled water from a water treatment plant to the point of use. However, if the treatment plant needs to be expanded to provide the supply *(or a portion of the supply)*, then this should be indicated.

The description should include a detailed map of the project area, preferably a 1:24,000 scale copy or original of a 7.5 minute USGS quad sheet, marked with the locations of the project components. If recycled water is to be used as a source, indicate the location of the existing or proposed waste water treatment plant.

Mark the project description and map as Attachment B-1.

B-2

Legal description of project site

Provide a legal description of the project site, stating the location of the project *(including county, nearest city, section number(s), township, range, base, and meridian)*.

Mark as Attachment B-2.

B-3

Project timetable

Provide a timetable showing expected tasks and project completion. The timetable should be broken down to task or sub-task level of detail, and should indicate expected time requirements for completion of major project milestones, including:

- obtain financing
- design project
- acquire rights of way
- acquire water rights
- acquire all necessary permits
- prepare environmental documentation *(e.g., California Environmental Quality Act)*
- begin construction
- complete construction
- develop environmental mitigation plan, if applicable

The timetable should preferably be in a horizontal bar chart format. Tasks may overlap.

Note: If the proposed project is to be phased, expand the project timetable to include all of the necessary information for each phase.

Mark as Attachment B-3.

Part C - Engineering and Hydrologic Feasibility

“Engineering feasibility” means that the proposed project can be designed, constructed, and operated to accomplish its intended purposes and that it is planned in accordance with generally accepted engineering and environmental principles and concepts. Sound hydrologic studies and information on water rights and the sufficiency of water supply are essential to the determination of engineering feasibility.

C-1

Certification statements

Certification statements regarding project feasibility must be signed by a California registered civil engineer and when applicable, by a California-registered geologist. The statements are found in Appendix II and must be submitted with the application. Include a citation of the reference sources used to document the statement findings such as feasibility studies, engineering design studies, or water right permits.

**Mark certification statements in
Appendix II and the citation of reference sources as Attachment C-1.**

C-2

Project hydrology

Use Table C-2 (page 17) to calculate the availability of water for the life of the project, which is assumed to be 50 years. Provide documentation that you have water rights, an agreement, or a contract for the surface water, groundwater, or recycled water that you propose to import or convey (*or extract from a managed basin*).

Provide a statement describing the agency’s water rights to the water currently used, including the type, duration, quantity, and date when agreements governing the water rights were obtained. Provide copies of any contractual agreements governing the water rights. Cite all pertinent statutes.

For State Water Project/Central Valley Project Supplies: If the project would use water from the State Water Project and/or the Central Valley Project, include a copy of your SWP or CVP contract to document your source of water.

Describe the agency’s plan for use of any new water supplies developed by the project, and describe the effect that this project may have on the above water rights.

If you have any questions concerning your water rights, contact the State Water Resources Control Board, Division of Water Rights, at (916) 341-5300.

Table C-2

Use Table C-2 to calculate the estimated yield of the project. If the project is a surface facility (*e.g., reservoir, pipeline, etc.*), then show its yield in the “Surface Deliveries” column. This yield may be shown as average annual yield, which is the same for all years, or it may reflect fluctuations over time. If the project is a groundwater extraction project, use the “Extractions” column to show project yield.

For a proposed reservoir project, the hydrologic frequency and amount of flow of the project water source must be determined for a 50-year project life, using data from the last 50 years. If data is not available, applicants must reconstruct water data for the above period by means of a technically acceptable method. Discuss the methods and assumptions used to synthesize a database.

Mark source description and water rights documentation, including Table C-2, as Attachment C-2.

C-3

Project reports

Submit copies of any studies previously prepared for the project (*such as feasibility studies, Environmental Impact Reports, etc.*). Discuss any reports in progress.

Mark your responses and list as Attachment C-3.

C-4

Preliminary plans and specifications

Provide a copy of preliminary project plans indicating type of construction, types and quantities of materials, dimensions, cross-sectional drawings, profile drawings (*if available*), location, elevation, planned mitigation measures (*if required*), and other appropriate features. The preliminary plans need to be at least a 30-percent plan drawing. Provide a copy of preliminary project specifications, including citations of all standards used and all applicable health and safety specifications.

A California-registered civil engineer must prepare the preliminary and final plans and specifications. Each final plan sheet and the cover sheet of the final specifications must be signed and stamped by a California-registered civil engineer.

Mark these items as Attachment C-4.

C-5

Construction inspection plan

Provide a detailed construction inspection plan describing who will inspect the site and project before, during, and after construction, and when inspections will be made.

Mark as Attachment C-5.

C-6

Department of Health Services, Drinking Water Field Operations Branch project approval

Obtain DHS, DWFOB project approval in writing from the local DHS District Engineer, if the proposed project will impact a domestic water supply. This approval must be obtained prior to the disbursement of funds. Approval needs to be obtained before initiating construction.

Mark as Attachment C-6.

Table C-2

Project yield—local projects (Section C-2)

Year	Surface Deliveries (AF)	Extractions (AF)	Year	Surface Deliveries (AF)	Extractions (AF)
1			26		
2			27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		
Average Annual Amounts (AF) (1)					

(1) For years 1 through 50; insert into “Table 1: Project performance” on page 23.

Part D - Economic Justification

A project will be considered cost effective if its primary benefits exceed its primary costs (i.e., if its benefit/cost ratio is greater than 1.0).

To establish that a project is cost effective, DWR requires that the applicant complete Tables 1-7 (Appendix III). These tables summarize the proposed project's annual water yield and benefit/cost data. The tables are available in Excel.

Applicants must use the following assumptions in determining the benefit and cost for the proposed project:

- **Period of analysis.** Economic evaluation of a project will be based on a 50-year useful life. Discounting will not significantly affect projects with longer useful lives; projects with shorter useful lives may be analyzed by including replacement cost (as discussed below).
- **Inflation and escalation.** In all cases, applicants will assume zero inflation and zero escalation of cost.
- **Discount Rate.** Because benefits and cost are evaluated over a 50-year project life, they must be discounted to reflect the value of money over time. (A dollar received today is worth more than one received in the future). Discounting is accomplished by multiplying the monetary value of benefits and costs that occur over the project's life by a present value factor that decreases annually. DWR uses a six-percent discount rate.
- **Value of the dollar.** All applications will be presented in current year dollars in order to ensure comparability.
- **Multiple-funded projects.** The economic analysis will be made of the entire project, regardless of funding sources. You must include all project costs in the economic analysis, even if the requested State loan will only fund part of the project. These costs include replacement and operating costs, purchase of water, and portion of construction costs funded from other sources.
- **Numbering years.** "Year" in this application refers to a calendar year. The last year of construction is Year 0, so that Year 1 is the first year of project operation. If the construction period exceeds one year, construction years are identified as Year 0 (last year of construction), -1,-2, etc. This allows the use of computerized tables on the spreadsheet with the correct discount rates applied.

D-1

Project Performance

Table 1 shows the total annual water deliveries or extraction in acre-feet to be realized from the project. This number should match what was developed in Table C-2.

D-2

Project Costs

Project costs may be either capital costs (construction) or annual operating and maintenance (O&M) costs. All costs must be included and clearly documented to allow a review to assess the accuracy and reasonableness of the analysis. Capital costs should correspond to the information provided in Section A-3 Project Budget. Although some project costs are not fundable under this program, all costs needed in order to obtain the project benefits must be included in the Benefit/Cost analysis. Costs of related facilities identified in B-1 should also be included.

- **Capital Costs.** Table 2 shows the capital costs required to plan and construct the project. These costs are all expenditures needed to complete the project so that operations may begin. The cost of land, structures, materials, equipment and labor, and contingency allowances of at least 15 percent must be included in total capital costs. Do not include financial costs, such as interest costs incurred during construction and long-term debt service costs.
- **Operations and Maintenance Costs.** When a project begins operation, it incurs annual operation and maintenance costs that vary with project output. These may include administration, maintenance, energy consumption, water purchase, and water extraction costs (whether incurred by the agency or individuals). Enter the Operations and Maintenance costs in Table 3. These costs are only the O&M costs associated with the new project. With a 50-year analysis period, most projects will have pumps or other machinery that must be replaced. This is an operating cost that also must be considered in the analysis. A component with a useful life of 25 years, for example, must be replaced in year 25 of the project.

Salvage value, any useful life remaining in the components after 50 years, will not be considered in this economic analysis.

D-3

Calculating project costs

Use Tables 2 and 3 (pages 23 - 25) to list project costs by item, according to the year in which they are expected to occur.

Mark the tables as Attachment D-2.

D-4

Project benefits

A project's benefits are determined by the value of the water that is developed by the project.

Benefits from facilities related to the project (Section B-1) can be included if their costs have been considered (Section D-2).

Benefits may be classified as either primary or secondary.

- **Primary benefits** accrue directly to users of the project's output. Benefits are best measured by the price that the new water can be sold for, or by the avoided cost of water that is no longer purchased.

- **Secondary benefits** (third-party impacts) are the “ripple” effects resulting from project operation and the generation of primary benefits.

You may only claim primary benefits in the Benefit/Cost analysis. Secondary benefits can be discussed in a separate attachment.

Types of primary benefits:

A local water supply project can provide several types of primary benefits, including water supply, power production, improvement of water quality, and flood control as follows:

- **Water supply.** The primary objective of local water supply projects is to provide additional water supplies for agricultural and/or urban uses. For this program, water supply benefits will be measured by three methods: least-costly alternative, avoided cost and wholesale vendibility.

1. Least-costly alternative measures benefits on the basis of the cost of the least costly alternative project likely to be built that would provide the same quantity and quality of water as the proposed project. Examples might include conservation programs, a combination of smaller projects, expansion of existing facilities, ground water pumping (not in over-drafted basins), waste water reclamation, and water transfers if rights to sell and buy water exist. Applicants must be certain to use economic costs in this approach (discounted capital, operation, and maintenance costs over 50 years), so that benefit/cost ratios for the alternatives are comparable to those developed for the proposed project.

2. Avoided cost should be used if you intend to develop a new water supply to replace a more costly existing supply. The water supply benefit in this method is the price of the existing source of water that the project would replace.

3. Wholesale vendibility is the estimated price at which the applicant could sell additional water supplies wholesale to another water agency/vendor. .

A water supply benefit may only be claimed when the water is put to economic use. Care must be taken to claim the water supply benefits at the time that the water is used.

- **Power production.** Reservoirs or stream diversions (with sufficient hydrologic head) may provide hydropower benefits. As mentioned earlier, however, a project that would derive more than 50 percent of its benefits from the generation of hydroelectric power is not eligible for a loan under this program.
- **Improvement of water quality.** A new water supply project may provide benefits in the form of improved water quality. If an agency has excess capacity in existing water treatment plants, the benefit is measured by the avoidance of variable treatment costs (primarily chemicals). If an agency can show, however, that the project would allow it to avoid constructing in a new plant or upgrading an existing one, it may include the avoided costs as a water quality benefit.

Water quality improvements may also result from using surface water instead of ground water. Conversion to higher quality surface supply could allow growers to produce higher value crops or increase their yields with existing crops, thereby increasing net income.

You may claim a water quality benefit in addition to the supply benefit if (1) the project water quality exceeds that of the existing supply and (2) you measure the project’s supply benefit by the alternative

cost of providing water quality equal to or less than the existing supply. You may not claim the quality benefit if you measured the supply benefit by the alternative cost of providing water of improved quality. In this case, the alternative cost already incorporated both types of benefits.

Flood damage reduction. Flood damage reduction benefits result from (1) reduction in damages caused by flood flows or (2) the reduced operation and maintenance costs of existing flood facilities (or, if the facilities are already at capacity, avoided expenditures for facilities expansion). As with the other methods, you must estimate flood damage reduction benefits by comparing “without project” and “with project” conditions.

D-5

Calculating project benefits

Enter the project benefits computed below into the appropriate Columns of Table 6b, Benefit/Cost Worksheet (Benefits)

Water supply benefit. Only one of the three following methods may be used to compute the water supply benefit. For an urban project, the least costly alternative method is preferred. The other two methods (avoided cost and wholesale vendibility) may be used for either type of project. If you do not use the preferred method to compute the water supply benefit, you should use the method that results in the smallest benefit.

Least-costly alternative method. The alternative chosen for comparison must provide essentially the same water quantity and quality as the project. Supply alternatives must be listed, along with respective yields and costs.

Complete Table 5 to identify the least costly alternative that may be delayed or eliminated as a result of the project. The name of the alternative is entered into Column a and its associated capital costs are entered into Column b. Column b is multiplied by the capital recovery factor in Column c to obtain annual capital costs, Column d, to which are added annual O&M costs, Column e, to obtain total annual costs. Total Annual Costs (Column f) are divided by Annual Project Yield (Column g) to obtain cost per acre-foot (Column h).

Enter the information from Column h (Cost per Acre Foot) in Column c, Table 5. In Table 5 multiply Columns b and c. Enter the product in Column d and in Column d, Table 6b.

Avoided cost method. List the existing water supply source(s) to be replaced (including quantities) and the annual cost for these supplies. The cost of these supplies is the avoided cost (water supply benefit) of your proposed project.

Enter the water supply benefit in dollars/acre-foot in Column c, Table 5. Multiply Columns b and c of Table 5. Enter the product in Column d and in Column d, Table 6b.

Wholesale vendibility. Use this method if your agency can sell additional water supplies to other agencies or wholesale customers. Identify agencies or customers that would be interested in purchasing this water and the sales price per acre-foot. Provide documentation that potential customers would be willing to pay the price indicated.

Enter the water supply benefit in dollars/acre-foot in Column c of Table 5. Multiply Columns b and c, entering the total water supply benefits in Column d and in Column d, Table 6b.

- **Power production benefit.** To estimate the project's power supply benefits, you must estimate both annual power generated and local energy values.

Annual power generated is calculated by determining the kilowatt/hours of electricity produced. Generating capacity is not the same as actual power generated; power plant energy generation fluctuates with water availability and energy demand.

Unit value of the least-cost alternative local power source may be obtained by contacting your local utility company, the Public Utilities Commission, or the California Energy Commission. Indicate the source of the unit value figure used in the calculation.

The power benefit is calculated by multiplying the kilowatt-hours generated by the unit value of the local power source. Values obtained per kilowatt-hour must be the value of wholesale power (how much the local utility is willing to pay for power generated by the project). Identify potential purchaser and document the price that they would be willing to pay for project power. Enter the figure in Column e of Table 6b.

- **Water quality benefit.** This benefit is measured either by the increase in benefit (i.e., agricultural production) or the decrease in costs (such as treatment costs). Another method of measuring water quality benefits is to determine the alternative action required to produce the same changes in water quality. These benefits occur when the water is used, not when water quality is improved.

Calculate the water quality benefits, showing methods used and assumptions made. Enter this information in Column f of Table 6b.

- **Flood control benefit.** Flood control benefits are measured only when water is removed from the flood stream during periods when flood facilities are in full use. In very large floods, the water removed which would have otherwise flowed to Tulare Lake, for example, would have a flood benefit measured by the flood loss avoided. These benefits may be stated as a dollar value of the property loss or crop loss avoided as a result of the project.

Calculate the flood control benefit, showing methods used and any assumptions made. Identify where the flood control benefits would occur. Is this area outside of the agency's boundaries? If so, this is not a primary benefit and should not be included. Enter this information in Column g of Table 6b.

Mark the tables as Attachment D-5.

D-6**Benefit/cost ratio**

Table 7 computes the B/C ratio from information developed in tables 1 through 6b. In the first row, the projects discounted benefits are entered. These benefits were developed in Table 6b. In the second row, enter the projects discounted costs, developed in Table 6a. Dividing the projects discounted benefits by its discounted costs results in the B/C ratio, which must be equal to or greater than 1.00 for the project to be considered cost-effective.

Mark the table as Attachment D-6.

Table 1 Project performance

Total Annual Water Deliveries or Extractions (AF) (1)	
--	--

(1) From Table C-2.

Table 2 Capital Costs
Local Water Supply Projects

Year (a)	6% Discount Rate (b)	Land (c)	Structure (d)	Other (1) (e)	Contingency (minimum 15%) (f)	Total (g)	Future Value (h)
-5	1.338						
-4	1.262						
-3	1.191						
-2	1.124						
-1	1.060						
0	1.000						
Total							

**Table 3 Operating Cost
Local Water Supply Projects**

Year (a)	Administrative Costs (b)	Maintenance Costs (c)	Replacement Costs (d)	Water Purchase Costs (e)	Other Operating Costs (f)	Total Operating Costs (g)
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						

39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
Total						

Table 4 Water Supply Benefit Calculation
Least Cost Alternative Method
Local Water Supply Projects

Alternative (a)	Total Capital Costs (b)	Capital Recovery Factor (c)	Annual Capital Cost (b x c) (d)	Annual O & M Costs (e)	Total Annual Costs (d + e) (f)	Annual Project Yield (Acre-Feet) (g)	Cost per Acre-Foot (f/g) (h)
		0.06344					
		0.06344					
		0.06344					
		0.06344					
		0.06344					
		0.06344					
		0.06344					

Alternative(s) Selected:

Reason(s):

Table 5: Water Supply Benefit
Local Water Supply Projects

Year Number (a)	Project Yield (Acre-Foot) (b)	Water Supply Benefit (\$/Acre-Foot) (c)	Total Water Supply Benefit (\$) (b x c) (d)
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			

38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
Total			

Table 6a: Benefit/Cost Worksheet (Costs)
Local Water Supply Projects

Year Number (a)	Project Yield (Acre-Feet) (b)	Discount Factor (c)	Costs			Discounted Costs (c x f) (g)
			Capital (d)	Operations (e)	Total Costs (d + e) (f)	
0		1.000				
1		0.943				
2		0.890				
3		0.840				
4		0.792				
5		0.747				
6		0.705				
7		0.665				
8		0.627				
9		0.592				
10		0.558				
11		0.527				
12		0.497				
13		0.469				
14		0.442				
15		0.417				
16		0.394				
17		0.371				
18		0.350				
19		0.331				
20		0.312				
21		0.294				
22		0.278				
23		0.262				
24		0.247				
25		0.233				
26		0.220				
27		0.207				
28		0.196				
29		0.185				
30		0.174				
31		0.164				
32		0.155				
33		0.146				
34		0.138				
35		0.130				
36		0.123				

37		0.116				
38		0.109				
39		0.103				
40		0.097				
41		0.092				
42		0.087				
43		0.082				
44		0.077				
45		0.073				
46		0.069				
47		0.065				
48		0.061				
49		0.058				
50		0.054				
Total						

Table 6b: Benefit/Cost Worksheet (Benefits)
Local Water Supply Projects

Year Number (a)	Project Yield (Acre-Feet) (b)	Discount Factor (c)	Benefits					Discounted Costs (c x h) (i)
			Water Supply (d)	Power (e)	Water Quality (f)	Flood Damage Control (g)	Total Benefits (d + e + f + g) (h)	
0		1.000						
1		0.943						
2		0.890						
3		0.840						
4		0.792						
5		0.747						
6		0.705						
7		0.665						
8		0.627						
9		0.592						
10		0.558						
11		0.527						
12		0.497						
13		0.469						
14		0.442						
15		0.417						
16		0.394						
17		0.371						
18		0.350						
19		0.331						
20		0.312						
21		0.294						
22		0.278						
23		0.262						
24		0.247						
25		0.233						
26		0.220						
27		0.207						
28		0.196						
29		0.185						
30		0.174						
31		0.164						
32		0.155						
33		0.146						
34		0.138						
35		0.130						

36		0.123						
37		0.116						
38		0.109						
39		0.103						
40		0.097						
41		0.092						
42		0.087						
43		0.082						
44		0.077						
45		0.073						
46		0.069						
47		0.065						
48		0.061						
49		0.058						
50		0.054						
Total								

Table 7 Benefit/Cost Worksheet
Local Water Supply Projects

Total Discounted Benefits	
Total Discounted Costs	
B/C Ratio	

Part E - Statewide Interest

“Statewide interest” is defined as the extent to which a proposed project (1) protects public or private property from damage, (2) protects natural resources against loss or waste or fosters their conservation and proper use, or (3) produces benefits that are disbursed generally throughout the community or project area.

This part of the loan application permits applicants to account for secondary benefits that could not be claimed in Part D, Economic justification, but which nevertheless increase a project's overall merit. Provide a narrative description of the scope of the proposed project's benefits, including answers to the following questions:

- How large is the geographic area over which direct project benefits extend?
- How many direct beneficiaries (*e.g., service area population, number of hookups*) will benefit from the project?
- Does the project provide fish and wildlife enhancement?

Other appropriate items under statewide interest could include the type or amount of land or wildlife habitat protected from flooding, number of persons protected from flooding, value of property protected, effect on future demand for water supplies, or recreational benefits.

Discuss the project features or particular circumstances and needs of your community or project area that demonstrate the project's statewide interest. The discussion should provide specific details to show how the project's benefits meet one or more of the categories mentioned in the definition of statewide interest.

Mark this material as Attachment E.

Part F - Critical Need

“Critical need” is the same as "urgency of need" and refers to the physical need by the community for the project and the financial need of the applicant agency. Physical need is determined by the general state of the current water system, adequacy of the water supply, dependency on the water supply, water quality conditions, and the availability of alternative water supplies. Financial need is demonstrated by the applicant's fiscal status and its inability to fund the project from other sources, as determined in Part A (pages 2 to 12) of the application.

Critical need will be assessed using information supplied in this section, in addition to that received in Part A (*Organizational/financial, and legal information*).

This criterion is one of four that the Department will use to evaluate this project for funding. Financial need is demonstrated by the applicant's fiscal status and its ability to fund the project from other sources, as demonstrated in Part A.

F-1

Physical need for the proposed project

Include a detailed narrative description of the current water system conditions. Describe the agency's current sources of water, including substitute supplies and existing facilities. Also describe current and projected water needs. Describe how the proposed project will meet those needs.

Mark as Attachment F-1.

F-2

Impacts of not constructing the proposed project

Include a detailed narrative description of the expected impacts within the community, if the proposed project is not constructed. Factors impacted could include population, employment, business/industry, irrigated acreage, emergency supplies, water quality, agency loss or gain of revenue, public safety, agricultural conversion to urban water uses, and the environment.

Mark as Attachment F-2.

Part G - Environmental Documentation

The environmental, social, and economic impacts of the proposed project should be discussed in detail in the environmental documents required under the California Environmental Quality Act (*CEQA*) and the National Environmental Policy Act (*NEPA*) if applicable.

The environmental documents must identify all of the anticipated adverse impacts associated with project construction and provide a plan to avoid or mitigate these impacts. The purpose of this section is not to reanalyze the environmental documentation supporting the proposed project but rather to identify critical constraints to implementing the project in a timely manner.

Environmental issues are often complex and sometimes require considerable time and expense to resolve adequately. **Any and all environmental documentation, including environmental impact reports, environmental impact statements, negative declarations, permits, and mitigation agreements must be completed before any loans can be approved by DWR.** For this reason, the local agency needs to determine if any issues exist which represent significant obstacles to implementing a proposed project.

G-1

California Environmental Quality Act and National Environmental Policy Act

Under the California Environmental Quality Act (for the purposes of this program), the local agency is the "lead agency" for the proposed project. Before DWR can approve a loan for a project, the project's CEQA documentation must have circulated through the state clearinghouse process, and a Final Notice of Determination must be recorded and filed with the local County Clerk, in the county where the project is located. A letter must be obtained from the agency's legal counsel which states that no legal challenges or protests were filed against the Negative Declaration or EIR during the 30-day Statute of Limitations period following the posting of the Notice of Determination.

For complete information on the CEQA process, obtain a copy of the California State Clearinghouse Handbook from the State of California Governor's Office, Office of Planning and Research, at P.O. Box 3044, Sacramento, CA 95812-3044, or by calling (916) 445-0613.

To initiate the CEQA process, the agency must prepare an initial study, and then prepare either an EIR or a negative declaration. Negative declarations must describe adequately why the project will not have adverse environmental impacts. Negative declarations need to include descriptions of specific mitigation measures that will reduce the environmental impacts of the proposed project. Since major construction projects may have a significant effect on the environment, DWR generally will not accept categorical exemptions.

Under CEQA, an agency must consult with all other government agencies having an interest in or responsibility for the project, the site, or the possible impacts of the project. DWR suggests contacting the California Department of Fish and Game and other local, State, and/or federal agencies early in the CEQA process. If the U.S. Fish and Wildlife Service or the Department of Fish and Game request a fish and wildlife agreement for the proposed project, signed copies of the agreement need to be included in the CEQA/NEPA documentation and will be referenced in the DWR contract for the loan.

If the CEQA process for the project is not complete at the time the application is submitted, provide a descriptive plan and timetable showing the steps to be taken to complete the CEQA process, and provide

copies of all CEQA-related documents. If the proposed project is within federal jurisdiction, the project may be subject to NEPA. In this case, also provide copies of all NEPA-related documents.

Complete the current CEQA Environmental Impact Checklist using available information. The current checklist can be found at http://ceres.ca.gov/topic/env_law/ceqa/guidelines/appendices.html. If an Initial Study already has been prepared, provide a copy of the checklist accompanying that document.

Mark as Attachment G-1.

G-2

Demonstration of community support and/or opposition

Submit copies of any letters from local environmental organizations, community groups, political bodies, as well as newspaper articles demonstrating support for the proposed project.

Describe any opposition to the proposed project. Identify the party(*ies*) in opposition, and briefly discuss the situation.

Mark as Attachment G-2.

G-3

Permits, easements, acquisitions, certifications

List and include copies of all required permits, easement rights, land acquisitions, certification of approvals of federal, State, and local agencies. If the project requires Section 404 permits, or streambed alteration permits, address in the CEQA/NEPA process. All environmental documentation must be obtained prior to contract execution.

Environmental documentation” means written documentation prepared in compliance with all applicable laws and guidelines related to the protection of the environment and resources of the State, including but not limited to CEQA, NEPA, the Federal Clean Water Act, the California Fish and Game Code, the California Endangered Species Act and the Federal Endangered Species Act. (See Appendix VI for a list of possible required permits.)

If the project will involve or impact a reservoir or dam of any dimension, provide a copy of the DWR Safety of Dams Certificate of Approval or a Statement of Exemption. If you have questions on dam safety, call the DWR Division of Safety of Dams at (916) 445-1520.

Submit a plan and schedule for obtaining permits required for the project.

Mark as Attachment G-3.

G-4

Water conservation program

Describe the agency's water conservation management plan and the best management practices (BMPs) it entails (attach copy). Explain how this plan will reduce the need to develop additional sources of water.

For questions on water conservation plans and BMPs, contact the Office of Water Use Efficiency (DWR) at (916) 651-9671.

Mark as Attachment G-4.

Appendix I

Checklist of attachments

Complete this checklist to confirm all sections and attachments to this application package have been completed.

Part A—Organizational, Financial and Legal Information

- ☐ A-1 Application cover sheet
- ☐ A-2 Agency representatives
- ☐ A-3 Project cost
- ☐ A-4 Plat map of service area
- ☐ A-5 Authorizing resolution
- ☐ A-6 Financial statements
- ☐ A-7 Cash reserves
- ☐ A-8 Existing debt
- ☐ A-9 Repayment method
- ☐ A-10 Loan security
- ☐ A-11 Rate and service structure
- ☐ A-12 Population data
- ☐ A-13 Agency authority

Part B—Project description

- ☐ B-1 Project description (one page maximum) and map
- ☐ B-2 Legal description of project site
- ☐ B-3 Project timetable

Part C—Engineering and Hydrologic Feasibility

- ☐ C-1 Certification statements
- ☐ C-2 Project hydrology
 - ☐ Table C2
- ☐ C-3 Project reports (*list of previous studies*)
- ☐ C-4 Preliminary project plans and specifications
- ☐ C-5 Construction inspection plan)
- ☐ C-6 Department of Health Services, Drinking Water Field Operations Branch project approval)

D—Economic Justification

- ☐ D-1 Analysis assumptions
- ☐ D-2 Project performance (*Appendix III, Table 1*)
- ☐ D-3 Project costs (*Appendix III, Tables 2, 3, and 4*)
- ☐ D-4 Project benefits (*Appendix III, Tables 5a, 5b, and 5c*)
- ☐ D-5 Benefit/cost ratio (*Appendix III, Table 6*)

Part E—Statewide Interest

Part F—Critical Need

- ☐ F-1 Physical need for the proposed project
- ☐ F-2 Impacts of not constructing the proposed project

Part G—Environmental Documentation

- ☐ G-1 California Environmental Quality Act and National Environmental Policy Act
- ☐ G-2 Demonstration of community support and/or opposition
- ☐ G-3 Permits, easements, acquisitions, certifications
- ☐ G-4 Water conservation program

Appendix II

Certification statements

Engineering feasibility statement

I, _____

California registered civil engineer, have reviewed the information presented in support of this application. Based on this information, and any other knowledge I have regarding the proposed project, I find that it can be designed, constructed, and operated to accomplish the purpose for which it is planned. There is a sufficient water supply for the project. The information I have reviewed to document this statement includes (*provide list, e.g., feasibility studies, engineering design studies, water rights permits, etc.*):

(*Signature and stamp with expiration date*)

Appendix II

Certification statements *(continued)*

Hydrogeologic feasibility statement

Note: The following statement, signature, and stamp of a California registered geologist is required only if the proposed project involves the use of groundwater.

I, _____

California registered geologist, have reviewed the information presented in support of this application. Based on this information, and any other knowledge I have regarding the proposed project, I find that it is a feasible local water supply project from a hydrogeologic standpoint and should function as described in this application. The information I have reviewed to document this statement includes *(provide list, e.g., feasibility studies, hydrogeologic studies, data reports, chemical analysis of aquifer water, etc.)*:

(Signature and stamp with expiration date)

Appendix III

Sample resolution

Resolution No. _____

Resolved by the _____
(Governing body, city council, or other)

of the _____
(Agency, city, county, or other)

that pursuant and subject to all of the terms and provisions of the California
Water Conservation and Water Quality Bond Law of 1988 and amendments
thereto, application by this _____
(Agency, city, county, or other)

be made to the California Department of Water Resources to obtain a local water
supply construction loan.

The _____ of the
(Presiding officer, president, city manager, or other official)

_____ is hereby authorized and directed to
(Agency, city, county, or other)

prepare the necessary data, make investigations, sign, and file such application
with the California Department of Water Resources.

Passed and adopted at a regular meeting of the _____
(Board of Directors, Supervisors, etc.)

of the _____
(Agency, city, county, or other)

on _____ .
(Date)



Authorized
Signature _____

Printed Name _____

Title _____

Clerk/Secretary _____

Appendix IV

Permit checklist

Indicate whether any of the permits listed in this Appendix are needed for construction of your project. Discuss in Part G (pages 29 to 31). Note: an asterisk (*) indicates that you must obtain these permits, if applicable, prior to contract execution. Note: there may be additional permits not listed here that would be applicable to your project. If so, please provide details.

Type I: Is the project located in the areas listed?

<u>Geographic Area</u>	<u>Agency</u>	<u>Permit</u>
From 3 miles offshore to 1,000 yards inland	Coastal Commission	Coastal Development Permit
San Francisco, San Pablo, and Suisun bays from high water to 100 feet inland	San Francisco Bay Conservation and Development Commission	Development Permit
Suisun Marsh	San Francisco Bay Conservation and Development Commission	Marsh Development Permit
Lake Tahoe Watershed	Tahoe Regional Planning Agency	Development Permit
Floodways in the Central Valley	The Reclamation Board	Encroachment Permit
*Navigable waterways or streams affecting navigable waterways	U.S. Army Corps of Engineers	Section 10 Permit
*Wetlands, including coastal and inland waters, lakes	U.S. Army Corps of Engineers	Section 404 Permit for disposal of dredged material or placement of any fill material into wetlands, lakes, rivers or tributaries
	Regional Water Quality Control Board	Section 401 Certification
*Wild and scenic rivers	The Resources Agency	Approval of diversions; Finding of Compatibility

Type II: Does the project affect any of the resources listed?

<u>Resource</u>	<u>Agency</u>	<u>Permit</u>
Air	Air Pollution Control District	Authority to Construct and Permit to Operate for Activities emitting pollutants to the atmosphere
*Fish and wildlife habitat	U.S. Fish and Wildlife Service	Fish and Wildlife Agreements
	Department of Fish and Game	Streambed or Lake Alteration Agreements for Activities in streams or lakes and channels, and crossing spawning gravel protection
	Department of Fish and Game	Fish and Wildlife Agreements
*Water rights	State Water Resources Control Board, Regional Boards	Permit to Appropriate and State of Diversion and Use for Activities diverting surface water not previously appropriated
*Water quality	State Water Resources Control Board, Regional Boards	National Pollutant Discharge Permit or Waste Discharge Requirements for discharges to surface water; Water Reclamation Requirements
*Wetlands, including coastal and inland waters, lakes, rivers	U.S. Army Corps of Engineers	Section 404 Permit for disposal of dredged material or placement of any fill material into wetlands, lakes, rivers, or tributaries
*Navigable waters and tributaries to them	U.S. Army Corps of Engineers	Section 10 Permit for dredging, filling dock, groins, land jetties or for any obstruction or effect on the capacity of navigable waters
Navigable water and tributaries to them	Federal Energy Regulatory Commission	FERC License

Type II: Does the project affect any of the resources listed? *(continued)*

<u>Resource</u>	<u>Agency</u>	<u>Permit</u>
Beds of navigable waters	State Lands Commission	Land Use Lease for encroachments and docks
*Endangered species	U.S. Fish and Wildlife Service	Section 10a Incidental Take Permit
	Department of Fish and Game	Incidental Take Permit
Drinking water	Department of Health Services	Title 22 Drinking Water Standards

Type III: Does the project involve any of the following activities?

<u>Activity</u>	<u>Agency</u>	<u>Permit</u>
Power plants and transmission lines	California Energy Commission	Notice of Intention and Application for Certification
Generation of electrical power	Federal Energy Regulatory Commission	FERC Permit
Conversion of timberland to other uses	Department of Forestry	Timberland Conversion Permit
Cancellation of a Williamson Act Open Space	The Resources Agency	Approval of the Waiver of a Contract Cancellation Fee
Bridge construction	U.S. Coast Guard	Permit for bridges and causeways over navigable waters
Mineral prospecting and extraction on State lands	State Lands Commission	Prospecting Permit and Extraction Lease
Oil or gas well	Department of Conservation, Division of Oil and Gas	Oil or Gas Well Permit
Geothermal well	Department of Conservation, Division of Oil and Gas	Geothermal Well Permit

Type III: Does the project involve any of the following activities? *(continued)*

<u>Activity</u>	<u>Agency</u>	<u>Permit</u>
Geothermal prospecting and development on State lands	State Lands Commission	Geothermal Prospecting Permit and Extraction Lease
Encroachment on or across a State highway	Department of Transportation	Encroachment Permit; Utility Encroachment Permit
Construction, alteration, maintenance, operation, and removal of dams or reservoirs	Department of Water Resources, Division of Safety of Dams	Approval of Plans
Construction or alteration of dams	Federal Energy Regulatory Commission	FERC License
Dredging	Department of Fish and Game	Standard or Special Suction
Removal of sand, gravel, and dredge spoils from State-owned lands	State Lands Commission	Grant or Privilege
*Dredging or placement of fill or other materials or structure in wetlands	U.S. Army Corps of Engineers	404 Permit
	Regional Water Quality Control Board	401 Certification
*Water diversion from a State wild or scenic river	The Resources Agency	Determination of Need and No Adverse Effect
Surface mining	City or County	Reclamation Plan

Type IV: Property rights

Considerations

- Who owns or controls the land? (Private owner, lessee, public agency owner?)
- Does the loan applicant have the landowner's permission?